



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,653	03/18/2004	John McCafferty	05569.0004.DVUS12	8022

7590 05/08/2007
HOWREY SIMON ARNOLD & WHITE, LLP
Attention: Box No. 34
1299 Pennsylvania Avenue, N.W.
Washington, DC 20004-2402

EXAMINER

STEELE, AMBER D

ART UNIT	PAPER NUMBER
----------	--------------

1639

MAIL DATE	DELIVERY MODE
-----------	---------------

05/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,653

Applicant(s)

MCCAFFERTY ET AL.

Examiner

Amber D. Steele

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/21/07
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/18/04 Pp 1-11</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. The amendment to the claims received on February 21, 2007 amended claim 1.

Claims 1-5 are currently pending and under consideration.

Information Disclosure Statement

2. Applicants assert that the references listed in the IDS filed March 18, 2006 (references B1-B17, C1-C119, and C1-C104 which were expunged from the record per applicants request/petition during the prosecution of U.S. Patent Application 09/726,219) were considered during prosecution of U.S. Patent Application 09/726,219. However, U.S. Patent Application 09/726,219 does not contain copies of references B1-B17 or C1-C119 and the copies of references C1-C104 were expunged from the record per applicants request. In addition, U.S. Patent Application 08/484,893 only contained references C4-C5, C13, C23-C25, C29-C31, C35, C40, C43-C44, C51-C52, C58, C61, C63-C64, C67, C72, C80, C82, C84, C86, C89, C97, C103, C111-C112, and C119. Please note that application 07/971,857 is still not available for review by the examiner of record.

Withdrawn Objections

3. The objection to the drawings regarding sequences from the sequence listing duplicated in the drawings is withdrawn in view of applicants arguments regarding additional information provided including alignments, restriction enzyme cleavage sites, etc.
4. The objection to the abstract is withdrawn in view of the amendment to the abstract received on February 21, 2007.

5. The objection to the disclosure regarding SEQ ID NOs: and □ symbols is withdrawn in view of the amendments to the specification received on February 21, 2007.

Withdrawn Rejections

6. The rejection of claims 1-5 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in view of applicants arguments regarding the diversity of the examples drawn to the presently claimed method (e.g. dAb, scFv, PDGF-R, nuclease, CD4, Fab, Fv, and alkaline phosphatase phage displayed) and the amendment to the claims received on February 21, 2007.

7. The rejection of claims 1-5 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20, 23-24, 30-40, 43-49, and 52-57 of U.S. Patent No. 5,969,108 is withdrawn in view of the terminal disclaimer received on February 21, 2007.

8. The rejection of claims 1-5 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-41 of U.S. Patent No. 5,885,793 is withdrawn in view of the terminal disclaimer received on February 21, 2007.

9. The rejection of claims 1-5 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,555,313 is withdrawn in view of the terminal disclaimer received on February 21, 2007.

Art Unit: 1639

10. The rejection of claims 1-5 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,582,915 is withdrawn in view of the terminal disclaimer received on February 21, 2007.

11. The rejections of claims 1, 2, 3, 4, and/or 5 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent 5,871,907; claims 1-40 of U.S. Patent 5,858,657; claims 1-85 of U.S. Patent 5,837,242; claims 1-54 of U.S. Patent 7,063,943; claims 1-98 of U.S. Patent 6,916,605; claims 1-40 of U.S. Patent 6,521,404; claims 1-54 of U.S. Patent 6,544,731; and claims 1-8 of U.S. Patent 6,593,081 are withdrawn in view of the terminal disclaimer received on February 21, 2007.

Maintained Rejection

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The rejection has been altered to reflect the claim amendments received on February 21, 2007.

Claim Rejections - 35 USC § 102

13. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Ladner et al. U.S. Patent 5,223,409 earliest potential effective filing date of September 2, 1988.

For present claim 1, Ladner et al. teach methods of displaying binding proteins on the surface of filamentous bacteriophage via nucleic acid sequences including gIII and screening for target molecule binding wherein phagemids and helper phage may be utilized (please refer to entire document particularly abstract; columns 1, 4-12, 15-105; Examples I-XVI; claims 1-66).

Art Unit: 1639

For present claim 2, Ladner et al. teach separating bacteriophage expressing binding proteins from the target molecules (please refer to entire document particularly columns 10-12, 93-98).

For present claim 3, Ladner et al. teach recovering of separated bacteriophage (please refer to entire document particularly columns 10-12, 98-99).

For present claim 4, Ladner et al. teach expressing the binding protein in another expression system including bacterial cells, spores, and artificial methods, etc. (please refer to entire document particularly columns 8, 10, 50-77).

For present claim 5, Ladner et al. teach utilizing the methods to express antibodies including the Fc portion (please refer to entire document particularly columns 15-16).

Therefore, the presently claimed invention is anticipated by the teachings of Ladner et al.

Arguments and Response

14. Applicants' arguments directed to the rejection under 35 USC 102 (e) as being anticipated by Ladner et al. for claims 1-5 were considered but are not persuasive for the following reasons.

Applicants contend that Ladner et al. does not teach helper phage or phagemid.

Applicants' arguments are not convincing since the teachings of Ladner et al. anticipate the method of the instant claims. Ladner et al. teach helper phage and phagemid (please refer to column 76, lines 15-21 and 55-67; column 77, lines 1-20; Example 1 particularly column 106, lines 5-10, 34-39, and 54-58 and column 111, lines 15-40 and column 113, lines 4-12; Example III particularly column 126, lines 45-49; Example XI particularly column 169, lines 20-29).

Art Unit: 1639

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Future Communications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amber D. Steele whose telephone number is 571-272-5538. The examiner can normally be reached on Monday through Friday 9:00AM-5:00PM.

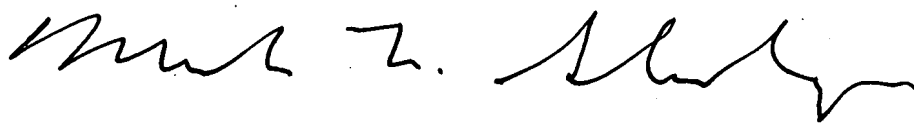
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Schultz can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1639

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ADS

May 1, 2007

A handwritten signature in black ink, appearing to read 'Mark L. Shibuya', is written above the printed name.

MARK L. SHIBUYA
PRIMARY EXAMINER